

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended): A front electronic equipment system, comprising:
different kinds of load electrical parts, provided at a front portion of a vehicle;
electronic connectors, each electronic connector being fitted by direct connection to one kind of the load electrical parts;
a front electrical control unit, receiving a control signal for controlling the drive of the load electrical parts through a main bus line of the vehicle; and
a drive control unit, provided in the electronic connector, connected to the front electrical control unit through a sub bus line and wire harness, converting the control signal into a drive signal, and driving the load electrical parts based on the drive signal,
wherein the front electrical control unit is configured to convert a communication protocol of the control signal from a high speed communication protocol of the main bus line on the vehicle into a low speed communication protocol of the sub bus line on the vehicle, and transmits the control signal received through the main bus line to the drive control unit through the sub bus line; ~~and~~
wherein the one kind of the load electrical parts is mounted to the electronic connectors, and
wherein the direct connection comprises coupling a socket of the electronic connector with pins of the at least one of the load electrical part.
2. (cancelled).
3. (Previously Presented): The front electronic equipment system as set forth in claim 1, wherein the load electrical parts is a plurality of the load electrical parts;

the front electronic equipment system further comprising a first auxiliary equipment module on which a first load electrical parts of the plurality of load electrical parts is mounted; and

wherein the electronic connector provided with the drive control unit for driving the first load electrical parts is coupled with the first auxiliary equipment module.

4. (Currently Amended):~~The front electronic equipment system as set forth in claim 1,~~

A front electronic equipment system, comprising:

different kinds of load electrical parts, provided at a front portion of a vehicle;
electronic connectors, each electronic connector being fitted by direct connection to one kind of the load electrical parts;

a front electrical control unit, receiving a control signal for controlling the drive of the load electrical parts through a main bus line of the vehicle; and

a drive control unit, provided in the electronic connector, connected to the front electrical control unit through a sub bus line and wire harness, converting the control signal into a drive signal, and driving the load electrical parts based on the drive signal,

a second auxiliary equipment module on which a second load electrical parts of the plurality of load electrical parts and a sensor are mounted,

wherein the front electrical control unit is configured to convert a communication protocol of the control signal from a high speed communication protocol of the main bus line on the vehicle into a low speed communication protocol of the sub bus line on the vehicle, and transmits the control signal received through the main bus line to the drive control unit through the sub bus line;

wherein the one kind of the load electrical parts is mounted to the electronic connectors;

wherein the load electrical parts is a plurality of the load electrical parts;

~~the front electronic equipment system further comprising a second auxiliary equipment module on which a second load electrical parts of the plurality of load electrical parts and a sensor are mounted;~~

wherein the electronic connector provided with the drive control unit for driving the second load electrical parts is coupled with the second auxiliary equipment module;

wherein the drive control unit for driving the second load electrical parts converts a sensor signal outputted from the sensor into the control signal; and

wherein the drive control unit transmits the control signal to the front electrical control unit through the sub bus line.

5. (Original): The front electronic equipment system as set forth in claim 1, wherein the load electrical parts is a plurality of the load electrical parts;

the front electronic equipment system further comprising a first auxiliary equipment module on which a first load electrical parts of the plurality of load electrical parts is mounted; and

wherein the drive control unit for driving the first load electrical parts is provided at the first auxiliary equipment module.

6. (Original): The front electronic equipment system as set forth in claim 1, wherein the load electrical parts is a plurality of the load electrical parts;

the front electronic equipment system further comprising a second auxiliary equipment module on which a second load electrical parts of the plurality of load electrical parts and a sensor are mounted;

wherein the drive control unit for driving the second load electrical parts is provided at the second auxiliary equipment module;

wherein the drive control unit for driving the second load electrical parts converts a sensor signal outputted from the sensor into the control signal; and

wherein the drive control unit transmits the control signal to the front electrical control unit through the sub bus line.

7. (Original): The front electronic equipment system as set forth in claim 3, wherein the first load electrical parts has at least one of a clearance lamp and a cornering lamp.

8. (Original): The front electronic equipment system as set forth in claim 5, wherein the first load electrical parts has at least one of a clearance lamp and a cornering lamp.

9. (Original): The front electronic equipment system as set forth in claim 4, wherein the second load electrical parts has a front washer motor; and
wherein the sensor mounted on the second auxiliary equipment module has a washer level sensor.

10. (Original): The front electronic equipment system as set forth in claim 6, wherein the second load electrical parts has a front washer motor; and
wherein the sensor mounted on the second auxiliary equipment module has a washer level sensor.

11. (Original): The front electronic equipment system as set forth in claims 1, wherein the front electrical control unit is connected to the drive control unit through a power source line; and
wherein the control signal is transmitted between the front electrical control unit and the drive control unit by a superposed communication at the power source line served as the sub bus line.

12. (Previously Presented): The front electronic equipment system as set forth in claim 1, wherein the high speed communication protocol of the main bus line is controller areas network (CAN), and the low speed communication protocol of the sub bus line is Local Interconnect Network (LIN).

13. (Cancelled).